

Udzawa-type iterative method with parareal preconditioner for a parabolic optimal control problem

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Abstract

© Published under licence by IOP Publishing Ltd. The article deals with the optimal control problem with the parabolic equation as state problem. There are point-wise constraints on the state and control functions. The objective functional involves the observation given in the domain at each moment. The conditions for convergence Udzawa's type iterative method are given. The parareal method to inverse preconditioner is given. The results of calculations are presented.

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